

## CHIEF PATRON

Prof. S. Ramachandram, Vice-Chancellor, OU

## PATRONS

Prof. Ch. Gopal Reddy, Registrar, OU

Prof. Kumar Molugaram, Principal, UCE, OU

Prof. P. Laxminarayana, Dean, FoE, OU

Prof. P. Ramesh Babu, Head, MED, UCE, OU

## INSTITUTE COORDINATORS FOR GiAN

Prof. Kumar Molugaram

Principal, UCE, OU

Dr. Rama Krishna Dasari

Associate Professor, ECE, UCE, OU

## ORGANISING COMMITTEE

Prof. A. Krishnaiah

Prof. P. Usha Sri

Prof. Rega Rajendra

Prof. M. Chandra Sekhar Reddy

Prof. B. Hadya

Prof. K. Saraswathamma

Prof. Narsimhulu Sanke

Dr. M.V. Ramana Murthy

Dr. V. Uma Maheshwar

Dr. G. Narendar

Mr. E. Madhusudhan Raju

Dr. T. Nagaveni

Ms. TSRV Padmalatha

Dr. K. Buschaiah

Mr. G. Venkateshwarlu

Mr. K. L. Uday Kiran

Mr. K. Venkateshwarlu

Mr. U. Ashok Kumar

Mr. M. Prakash

## OSMANIA UNIVERSITY

Osmania University, established in 1917, is the seventh oldest in India, the third oldest in South India and first to be established in the erstwhile princely state of Hyderabad. The university has recently completed its 100 years of glorious existence and has emerged as one of the premier institutions of higher learning in the country. It has been re-accredited by NAAC with 'A+' Grade and was conferred with the coveted status of "University with Potential for Excellence" in the year 2012. It epitomizes the national agenda on higher education for Access, Equity and Quality through Expansion, Inclusiveness and Excellence. The University has a vast sprawling verdant campus of 1300 acres. It has 12 different Faculties and has got 56 Departments.

## UNIVERSITY COLLEGE OF ENGINEERING

The University College of Engineering has the distinction of being the oldest and the biggest among the Engineering Colleges in the State of Telangana. It was established in the year 1929, eleven years after the formation of Osmania University. The college was the sixth Engineering College to be established in the whole of British India. The college was given autonomous status in 1994. The college has celebrated Golden Jubilee in 1979, Diamond Jubilee in 1989 and Platinum Jubilee in 2004. The college has successfully completed TEQIP-I, TEQIP-II projects with the assistance of World Bank and based on the previous performance TEQIP-III was also granted. The college offers 6 Under Graduate programs, 25 Post Graduate programs which are aimed to match current industry needs and self employment. It also offers research programs leading to PhD in six different departments.

## MECHANICAL ENGINEERING DEPARTMENT

The Mechanical Engineering Department was established in the year 1939 at University College of Engineering, Osmania University. It has since then grown significantly by spreading its academic activities in offering courses at Undergraduate level as well as Post Graduate level. Apart from the undergraduate program the Department offers 3 Post Graduate programs (Production Engineering, Turbomachinery and Automation & Robotics) in regular stream and another 3 Post Graduate programs (Tool Design, CAD/CAM & DFM) in collaboration with CITD, Hyderabad. The Department also offers Ph.D. program, so far more than 100 Ph.Ds were awarded. The Department receives research and modernization grants from UGC, MHRD, DST, AICTE and Defence Labs. The Department has collaborative research work with Defence labs like DRDO, RCI, ARCI etc.

For Further Details Contact  
Course Coordinators

**Dr. L. SIVA RAMA KRISHNA**

Associate Professor

Department of Mechanical Engineering, UCE, OU

Email: [lsrkou@gmail.com](mailto:lsrkou@gmail.com)

Phone: +91-9849867046 (M)

and

**Dr. SRIRAM VENKATESH**

Professor

Department of Mechanical Engineering, UCE, OU

Email: [venkatmech@yahoo.co.in](mailto:venkatmech@yahoo.co.in)

Phone: +91-9440408333 (M)

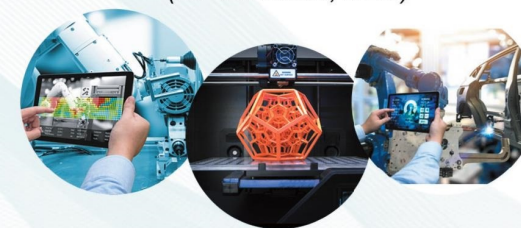


Call for Registration and Participation in  
**One Week GiAN Course on**

**Advances in Additive and Digital Manufacturing**

[Course Code: 175051L02]

(25 - 29 March, 2019)



By

International Faculty

**Prof. SUMAN DAS**

Woodruff School of Mechanical Engineering

Georgia Institute of Technology

Atlanta, GA 30332-0405, USA

Course Coordinators

**Dr. L. SIVA RAMA KRISHNA**

Associate Professor

&

**Dr. SRIRAM VENKATESH**

Professor



Organized by

**Department of Mechanical Engineering**

University College of Engineering (Autonomous)

**Osmania University**

Hyderabad-500 007, Telangana State, INDIA

## ABOUT GiAN COURSES

MHRD, Govt. of India has launched an innovative program titled 'Global Initiative of Academic Network's (GIAN) in Higher Education, in order to garner the best international experience into our system. As a part of this, internationally renowned Academicians and Scientists are invited to augment the country's academic resources, accelerate the pace of quality reforms and elevate India's scientific and technological capacity to global excellence.

## OVERVIEW OF THE COURSE

Additive Manufacturing (AM), often also referred to as 3D printing (3DP), refers to a group of methods and technologies that create arbitrarily complex three-dimensional structures through the sequential layer wise addition of materials in selected regions corresponding to digital slices of a computer-generated model. Over the past three decades AM has progressively matured from a small number of university research programs and a handful of companies to diverse commercial applications. AM technologies are widely adopted across the globe. In particular, the past decade has witnessed an explosion in research and development, commercialization and industrial use of AM technologies across a broad range of sectors spanning aerospace, defense, automotive, biomedical, printing, electronics, industrial manufacturing, construction, education, jewelry, sculpture, and art, to name just a few. Globally, there is strong interest in AM, as it has the potential to transform and disrupt entire markets, and manufacturing process and supply chains. Large investments are being made by governments and companies across the globe to get a head start in the coming digital manufacturing revolution facilitated by AM.

With the infusion of modern digital technology and ever more powerful computational capabilities, digital manufacturing in the form of Industry 4.0 is emerging through the confluence of data sciences/data analytics, integrated computational materials engineering and advanced additive manufacturing. It is vitally important for the future workforce to understand how modern manufacturing will be done this way across various industry sectors, which will lead to tremendous improvements in productivity and entirely new products, markets and supply chains.

The aim of this program is to provide a foundation of the key principles underlying advanced additive and digital manufacturing to a broad spectrum of researchers, industry practitioners, executives, teachers and students.

## COURSE CONTENTS

Fundamentals of AM & Digital Manufacturing, AM Process Categories, Process Models, Selection of AM Material Systems and Processes, AM Cost Modelling, Software Issues, Topology Optimization and Generative Design, Integrated Computational Materials Engineering, Case studies on applications of AM in Aerospace, Automotive, Consumer, Biomedical and other Industrial sectors. AM Laboratory Sessions.

## COURSE FACULTY: PROF. SUMAN DAS



Dr. Suman Das is presently working as Professor and Morris M. Bryan, Jr. Chair in Mechanical Engineering for Advanced Manufacturing Systems, Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, USA. He has total 27 years of Teaching and Research experience. His areas of research interests include Manufacturing, Mechanics of Materials, Bioengineering, Micro and Nano Engineering, Advanced Manufacturing and processing of metallic, polymeric, ceramic, and composite materials for applications in life sciences, propulsion, and energy. So far he is awarded with 5 US patents mostly in the area of additive manufacturing and three more patents are in pipeline for final approval. He has filed 14 invention disclosures till date. He has completed \$12.3 Million worth of research projects and consultancy works and ongoing another \$871,000. The funding agencies include NSF, Dept. of Defence, DURIP/Office of Naval Research, United Technologies Research Center, DARPA, Honeywell Military Avionics, Kimberly-Clark Corporation, National Institute of Health, National Institute for Dental and Craniofacial Research, Rolls-Royce Corporation, Rackham Grant and Fellowship Program, Office of Vice President of Research – The University of Michigan. He has won many prestigious Awards and Honours to name a few like Elsevier Science Direct Top 25 Hottest Articles Ranking for Biomaterials journal, Emerald Literati Club Highly Commended Award for Excellence, Eugene Merchant Outstanding Young Manufacturing Engineer Award from Society of Manufacturing Engineers, Career Award from National Science Foundation, Outstanding Doctoral Dissertation Award from University of Texa, Austin, Michael J. Koczak Outstanding Paper Award, TMS. He has published 56 articles in referred journals and 121 papers in prestigious conferences. He has also published two books and book chapters in Springer and Elsevier Science Ltd. Delivered 22 Keynote lectures and chaired 39 sessions in various prestigious conferences.

## WHO CAN PARTICIPATE

If you are a Faculty member working in Engineering & Polytechnic Colleges, Engineer / Researcher from Manufacturing, Service and Government Organizations including R&D laboratories, Research Scholar, UG or PG Student interested in learning or doing research work in the new concepts of 3D Printing & Digital Manufacturing.

## HOW TO REGISTER

**Stage - 1: Web (Portal) Register:** Visit GiAN Website at the link: <http://www.gian.iitkgp.ac.in/GREGN/index> and create login User ID and Password. Fill up the blank registration form and do web registration by paying Rs. 500/- online through Net Banking / Debit / Credit card. This provides him/her with life time registration to enroll in any number of the GiAN courses offered.

## Stage - 2: Course Registration (Through GiAN Portal):

Log in to the GiAN portal with the user ID and password created. Click on 'Course Registration' option given at the top of the registration form. Select the Course titled "Advances in Additive and Digital Manufacturing" with Course code "175051L02" from the list and click on 'Save' option. Confirm your registration by Clicking on 'Confirm Course'.

## SELECTION AND MODE OF PAYMENT

Selected candidates will be done on first cum first basis and will be intimated through Email. They have to remit the necessary course fee to the Bank as per the details given below

Account Name	PRINCIPAL UCE OU COORDINATOR GIAN
Account Number	37072716197
Bank	State Bank of India
Branch	Osmania University, Hyderabad
IFSC Code	SBIN0020071
MICR Code	500002342

## REGISTRATION FEES

Participants from abroad including students	USD 500
Participants from Industry/ Research Organizations	Rs. 6,000/-
Participants from Academic Institutions	Rs. 3,000/-
PhD / Research Scholars	Rs. 2,500/-
UG or PG student participants from India	Rs. 1,500/-

The course fee includes instructional materials, tutorials, laboratory and computer use, free internet facility, working lunch, mid sessions tea and snacks

**Note:** On request accommodation will be provided for few participants (on first come first basis) in the campus on payment. **No TA / DA will be paid.** For any queries regarding registration of the course, please contact the Course Coordinators.

## SPONSORSHIP

**Diamond Sponsor** : Rs. 1,00,000/-

**Golden Sponsors** : Rs. 50,000/-

**Silver Sponsors** : Rs. 25,000/-

Five, Four, and Three delegates can be deputed at free of registration cost for Diamond, Golden and Silver sponsors respectively.

**Last Date for Registration: 20<sup>th</sup> March 2019**